Agenda

Persistent Conflict & Army Imperatives

CIO/G-6 Campaign Plan & Strategy

CIO/G-6 Focus Areas

- Network Service Centers
- Cyber Operations/Warfare
- Knowledge Management & Data Czar
- Program Objective Memorandum 2010-2015

Conclusions

Era of Persistent Conflict

Globalization

Resource Competition

Extremist Networks

Demographic Trends

WMD Proliferation

Failed/Failing States

Climate Change

Extremist Networks

Terrorist Attacks

Oil/Gas Demand

Iraq — Iran — Afghan

Covert Action Nuclear Program

Insurgency

Islamic Extremism

Narco-Terrorism

Instability

Humanitarian

Natural Disasters

Protracted confrontation . . . fueled by *six important trends*

4 Army Imperatives

2008
CURRENT

Restoring Balance

2011
FUTURE

Current Demands

Readiness + Strategic Flexibility
___
Sustain Volunteer Force

Current and Future Demands

Readiness + Strategic Flexibility
___
Sustain Volunteer Force

U.S.ARMY

U.S.ARMY

IMPERATIVES
- **Sustain**
- **Prepare**
- **Reset**
- **Transform**

- Demand Exceeding Supply
- Counterinsurgency-Focused Force
- Accelerated Equipment Wear-Out
- Soldier and Family Stress

- Steady-State Achieved via Army Force Generation Process
- Full Spectrum Readiness
- Reconditioning and Recapitalization of Equipment
- Better Facilities and Increased Dwell Time for Soldiers

Army CIO/G-6 Strategic Goals

1 Develop and maintain a <u>secure, seamless, interdependent LandWarNet Network</u>

2 Lead <u>enterprise integration</u> by transforming <u>processes, applications and data</u> into net-enabled capabilities

3 Provide capabilities to enable <u>secure systems, networks, and information</u>

4 Optimize Army <u>Information Technology & Information Management investments</u> across Joint & Army capabilities

5 Develop the Army's <u>Information Technology & Information Management knowledge & skills</u> to support mission needs

6 Deliver an <u>Integrated Enterprise Strategy</u> to further Army & Joint warfighting capabilities

Army CIO/G-6 Strategic Goals

- **Network Service Centers**

- Cyber Operations/Warfare

- Knowledge Management & Data Czar
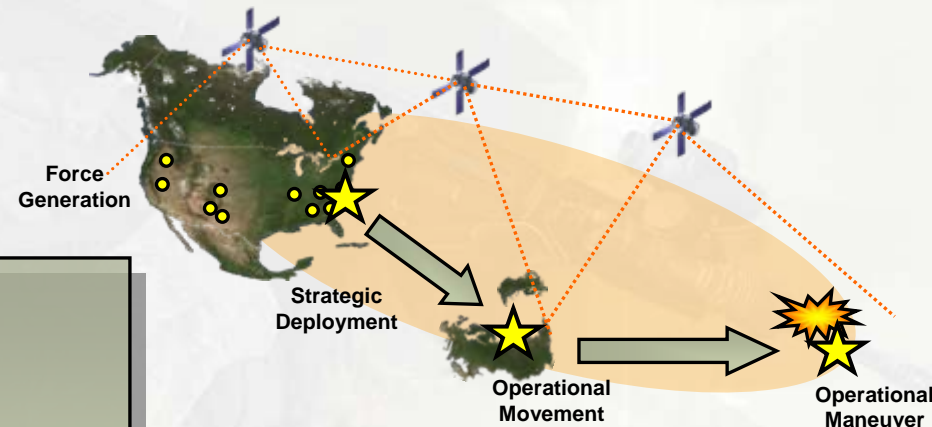
- Program Objective Memorandum 2010-2015

The strategic environment and demands of commander-centric, network-enabled expeditionary operations, significantly increases network reliance

FM 6-0 Mission Command: Command and Control of Army Forces

The Network Constantly and Simultaneously Supports Multiple Global Priorities, Enabling the Commander to:

- **Gain information superiority**
- **Make informed decisions**
- **Synchronize the warfighting functions**

Force Generation

Strategic Deployment

Operational Movement

Operational Maneuver

Commanders must have a full suite of network capabilities throughout all phases

SHAPE Phase 0	DETER Phase I	SEIZE INITIATIVE Phase II	DOMINATE Phase III	STABILIZE Phase IV	ENABLE CIVIL AUTHORITY Phase V

A Soldier's Story

OPERATIONAL IT/DATA REQUIREMENTS:

NETWORK – constantly changing

E-MAIL ADDRESS – constantly changing/multiple

TELEPHONE NUMBER – constantly changing/multiple

COLLABORATION TOOLS – constantly changing

FILE STORAGE SYSTEM – constantly changing

Garrison

AKO-S

(NIPR/SIPR**)**

808-555-2020

BlackBerry

Chat

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Honolulu

Garrison

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Hawaii, Hawaii
"The Big Island"

Garrison

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Ft Lewis / McChord AFB

Power Projection

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Garrison

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Deployed

AKO-S

AKO

DSN 318-965-6067

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Training

AKO-S

AKO

(SIPR/NIPR**)**

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CPOF

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Power Projection

AKO

AKO-S

(NIPR/SIPR**)**

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901-786-1524

Chat

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Ideal End-State

Universal E-Mail Address

Universal File Storage

One Telephone Number

Standard Collaboration Tool Set

SOLDIERS • FAMILIES • ARMY CIVILIANS

ARMY STRONG. U.S.ARMY

Situational Awareness

Reach Back to DISN/GIG

Command & Control

Imagery

Log/Admin Support

Comms on the Move

GPS/Mapping

DEPLOYED FORCES

Forces in thousands

- 542,000 — DESERT STORM (1991)
- 51,400 — KOSOVO (1999)
- 54,400 — ENDURING FREEDOM (2002)
- 123,000 — IRAQI FREEDOM (2003/04)

BANDWIDTH USED

Mbps

- 99 — DESERT STORM (1991)
- 250 — KOSOVO (1999)
- 736 — ENDURING FREEDOM (2002)
- 3.63 Gbps — IRAQI FREEDOM (2003/04)
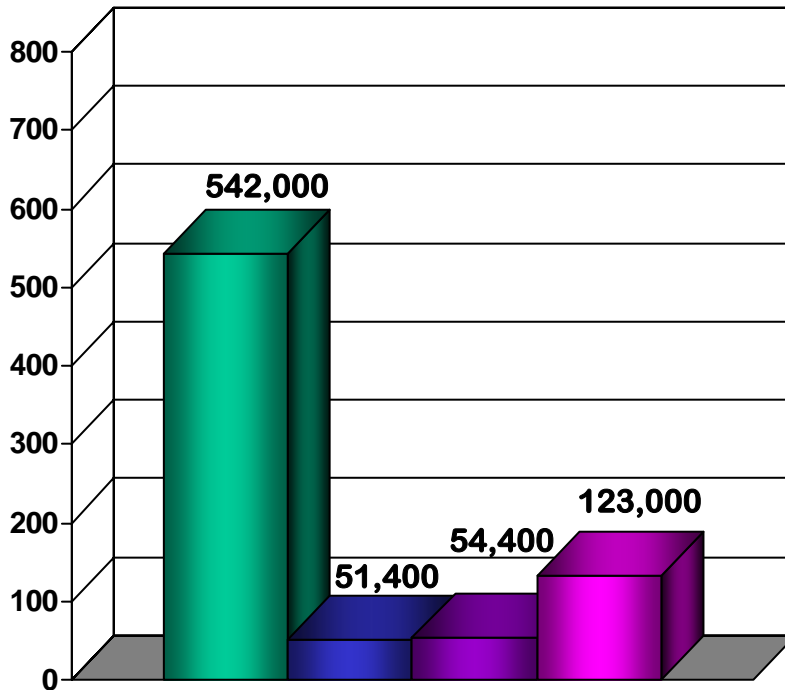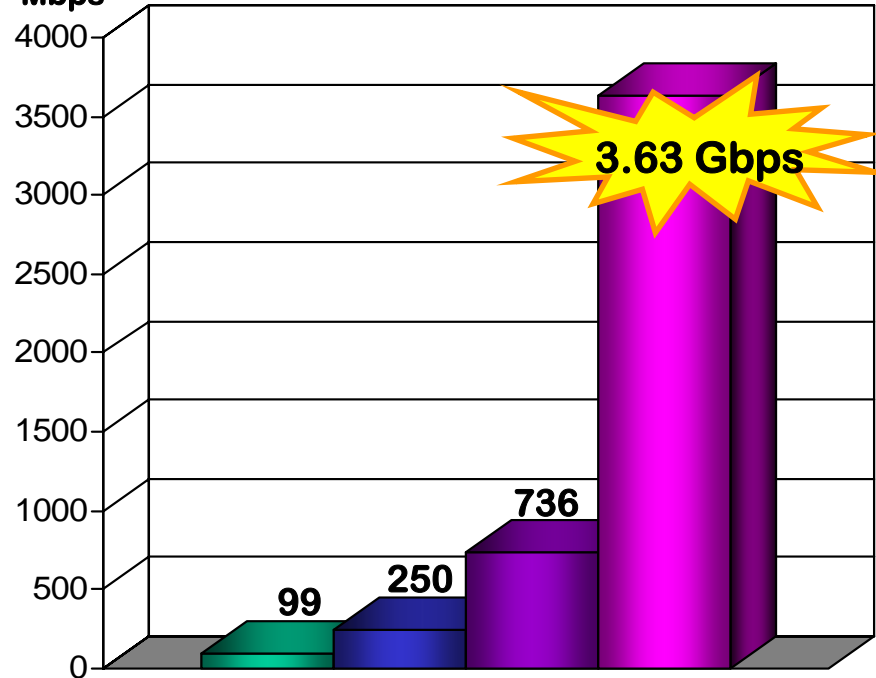
Legend:
- DESERT STORM (1991)
- KOSOVO (1999)
- ENDURING FREEDOM (2002)
- IRAQI FREEDOM (2003/04)

Ever-Increasing Bandwidth Demands

DESERT STORM 47 Mbps

12 Sep 01 46 Mbps

~50X Increase from 12 Sep 01

ENDURING FREEDOM & IRAQI FREEDOM (March 2003) 2.3 Gbps Combined

~2.5X Increase from March 03

CURRENT OEF & OIF Estimates (Feb 2008) ~5.5 Gbps Combined

35 Gbps

18 Gbps

9.8 Gbps

5.5 Gbps

Current　　　　**FY 10-11**　　　　**FY 12-14**　　　　**FY 15**
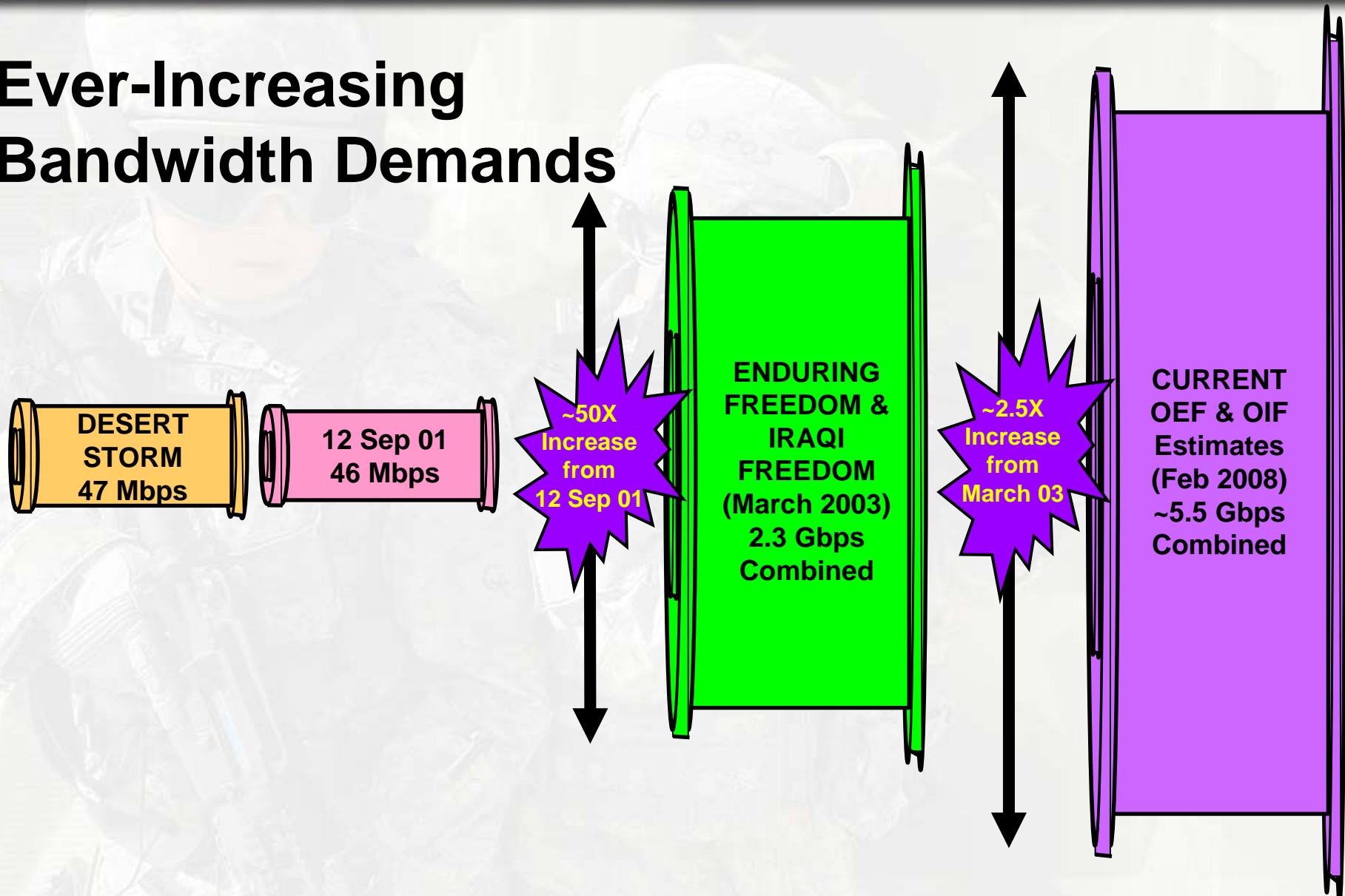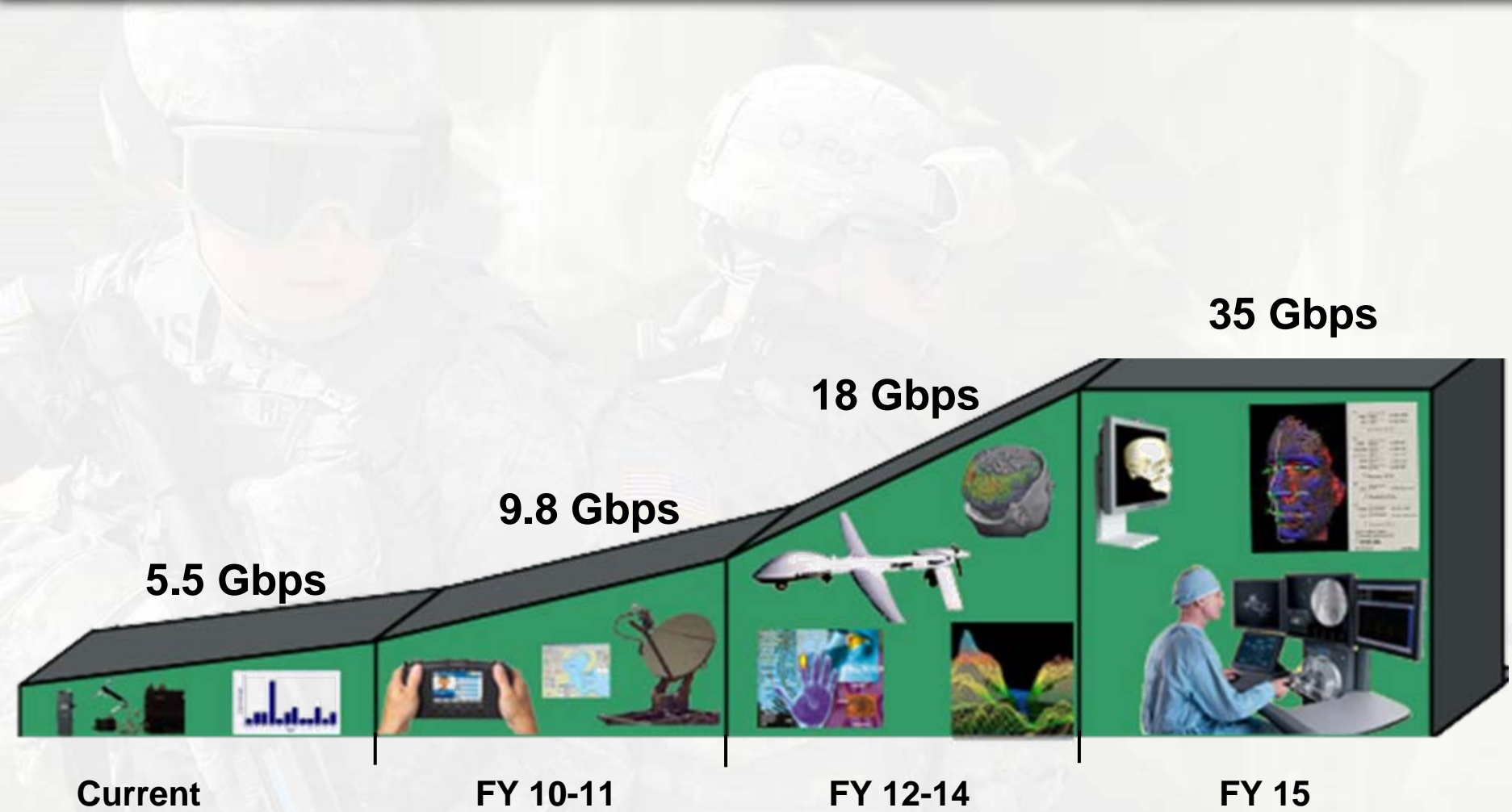
Regional Hub Nodes

- **Five locations to provide complete & overlapping coverage of Combatant Command Areas of Responsibility (AOR)**
  - All connected to the Global Information Grid (GIG)
  - Focus on Intertheater vs. Reachback via Teleports
  - Support Army/USMC Units & Comm-on-the-Move

**Regional Hub Nodes (RHN) –
5 Planned Locations World Wide**

Landstuhl/Ramstein

Korea

Okinowa

Ft. Buckner

Guam

Camp Roberts

Hawaii

North West

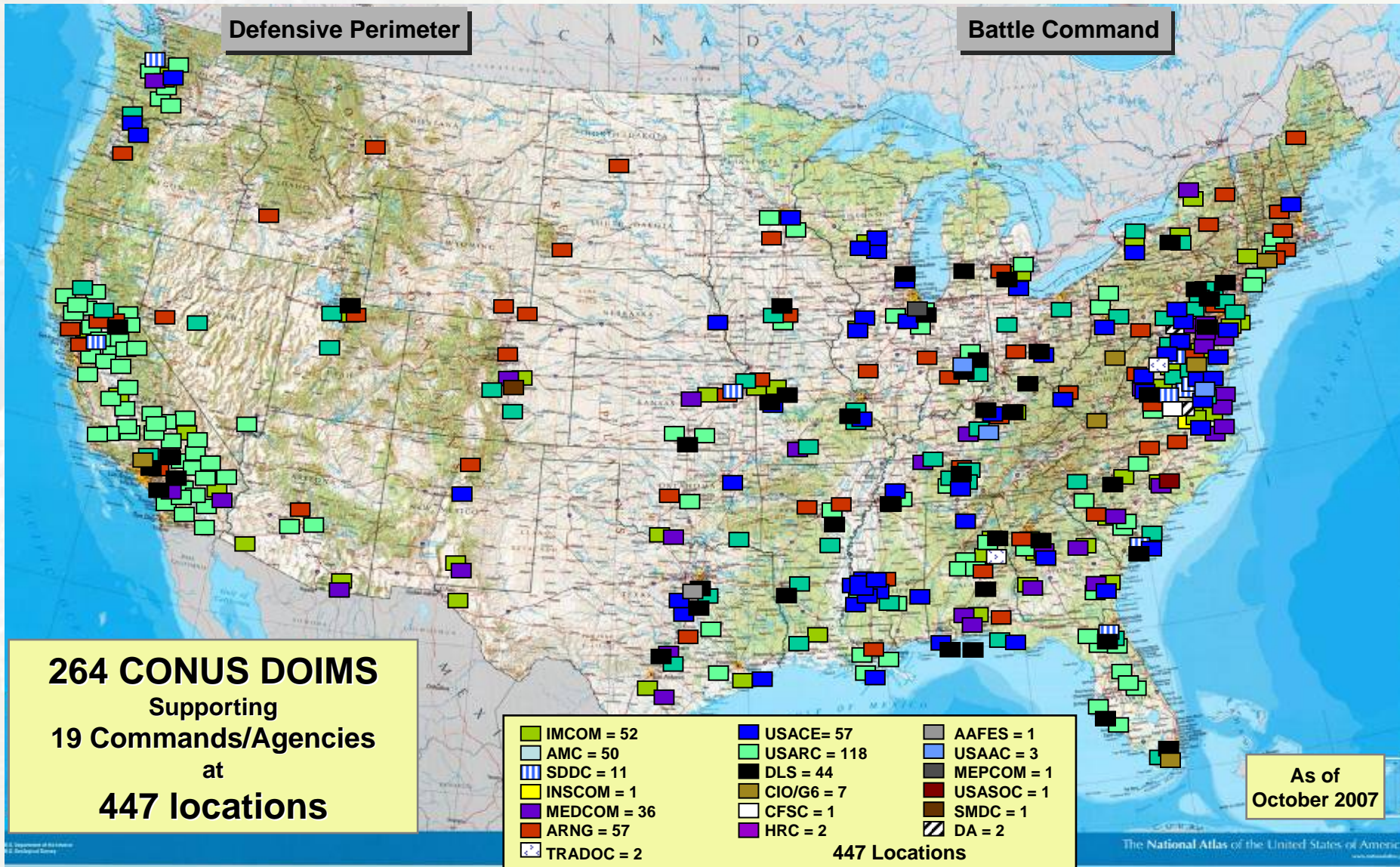Lago Di Patria

England

France

Germany

Wahiawa

America's Army: The Strength of the Nation – Army Strong

CONUS Mission Environment
Priority of Effort

Defensive Perimeter

Battle Command

264 CONUS DOIMS
Supporting
19 Commands/Agencies
at
447 locations

| Command	Count		Command	Count		Command	Count
IMCOM	= 52		USACE	= 57		AAFES	= 1
AMC	= 50		USARC	= 118		USAAC	= 3
SDDC	= 11		DLS	= 44		MEPCOM	= 1
INSCOM	= 1		CIO/G6	= 7		USASOC	= 1
MEDCOM	= 36		CFSC	= 1		SMDC	= 1
ARNG	= 57		HRC	= 2		DA	= 2
TRADOC	= 2					**447 Locations**	

As of October 2007

Area Processing Centers

➢ **The purpose of the APC initiative is to improve delivery services through:**
  – **Achieving Net-Centric Operations and Warfare Environment**
  – **Improving IA and Security Posture**
  – **Reducing Total Cost of Ownership (TCO) for Information Technology**

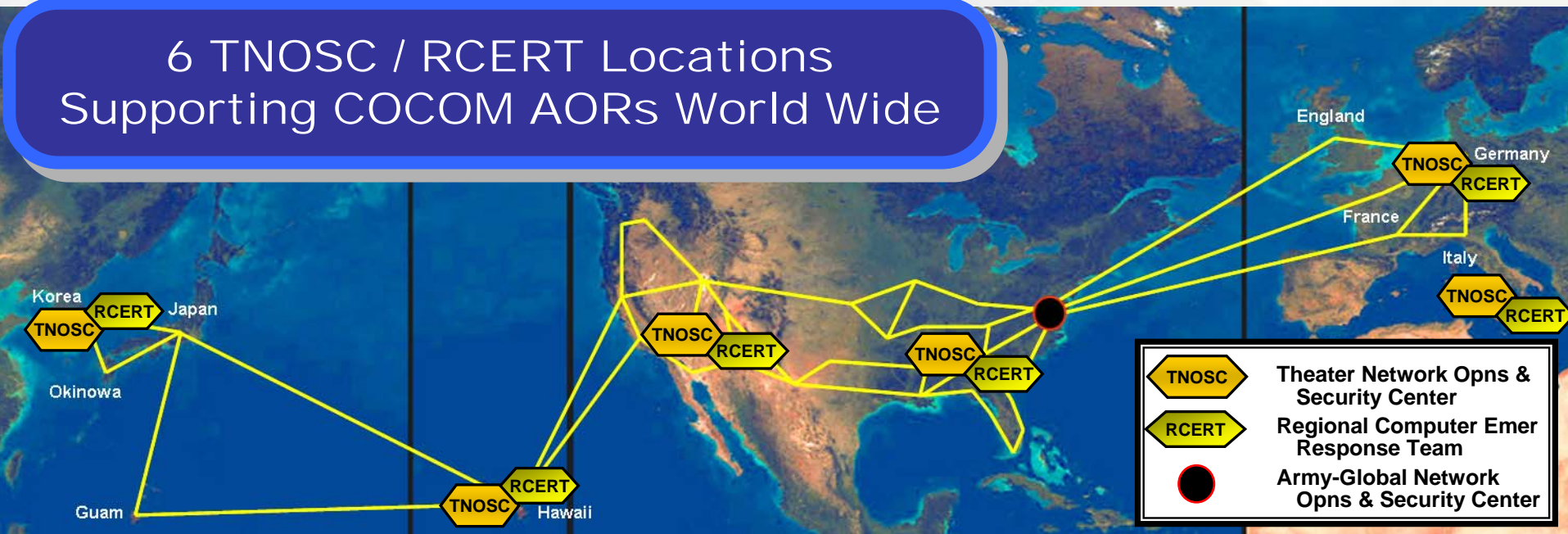|	
Ⓐ	APC – IOC
Ⓐ	APC – In Progress
Ⓐ	APC – Pre-decisional
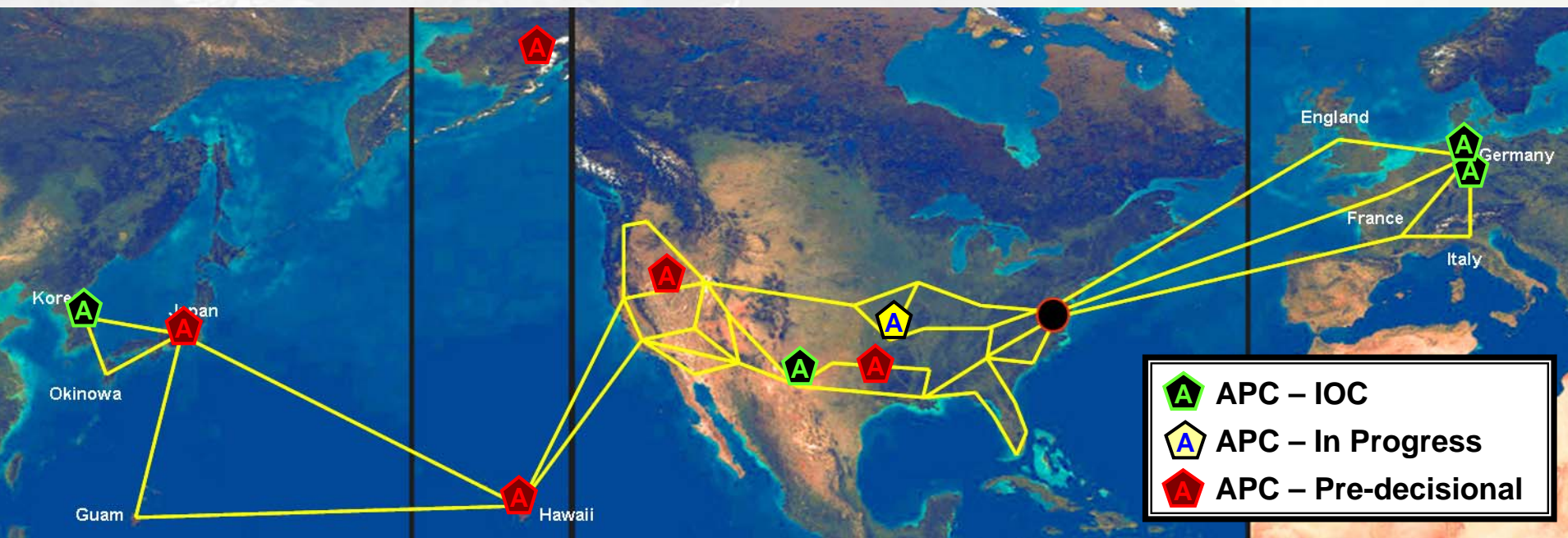
Theater NetOps & Security Centers

- **Six locations to provide complete & overlapping coverage of Combatant Command Areas of Responsibility (AOR)**
  - **GIG Enterprise Management, Content Management, Network Defense, Spectrum Management, Applications & Help Desk**
  - **NetOps enhanced Situation Awareness & optimize GIG availability**
  - **Collocated RCERT for increased Information Assurance & Security**

6 TNOSC / RCERT Locations Supporting COCOM AORs World Wide

Legend:
- **TNOSC** — Theater Network Opns & Security Center
- **RCERT** — Regional Computer Emer Response Team
- Army-Global Network Opns & Security Center

Network Service Center – Concept

Regional Hub Node (RHN)

- Provides Global Transport
- Intra-Theater Connectivity
- Up to 3 Div per Hub Node
- Connect to each other & DISN services in garrison

Area Processing Center (APC)

- Data & Applications
- Consolidated IT hardware
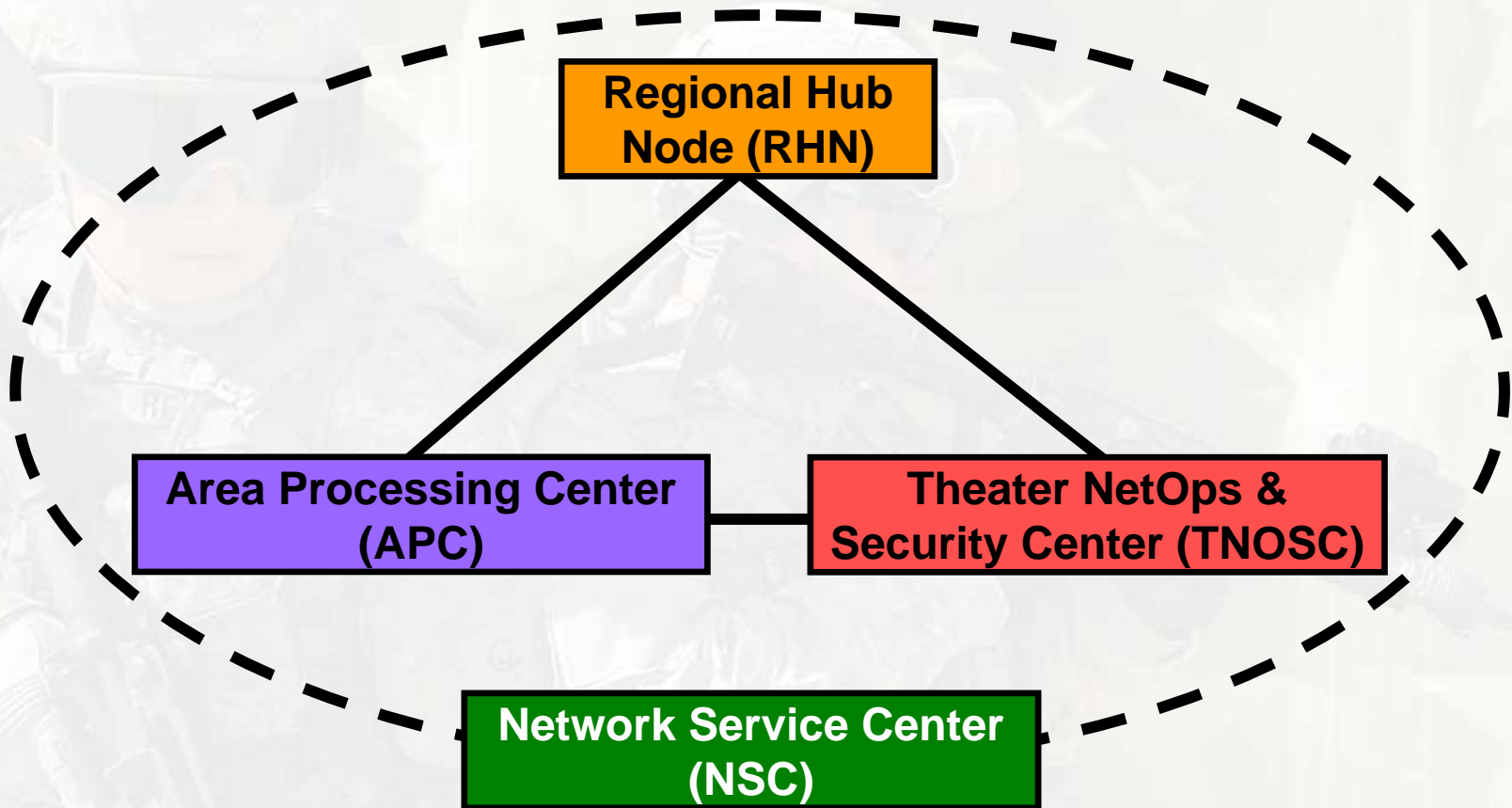- Projection & forward staging of info & services

Theater NetOps & Security Center (TNOSC)

- Technical oversight, enterprise, content, spectrum & Help Desk
- NetOps SA & optimize GIG avail
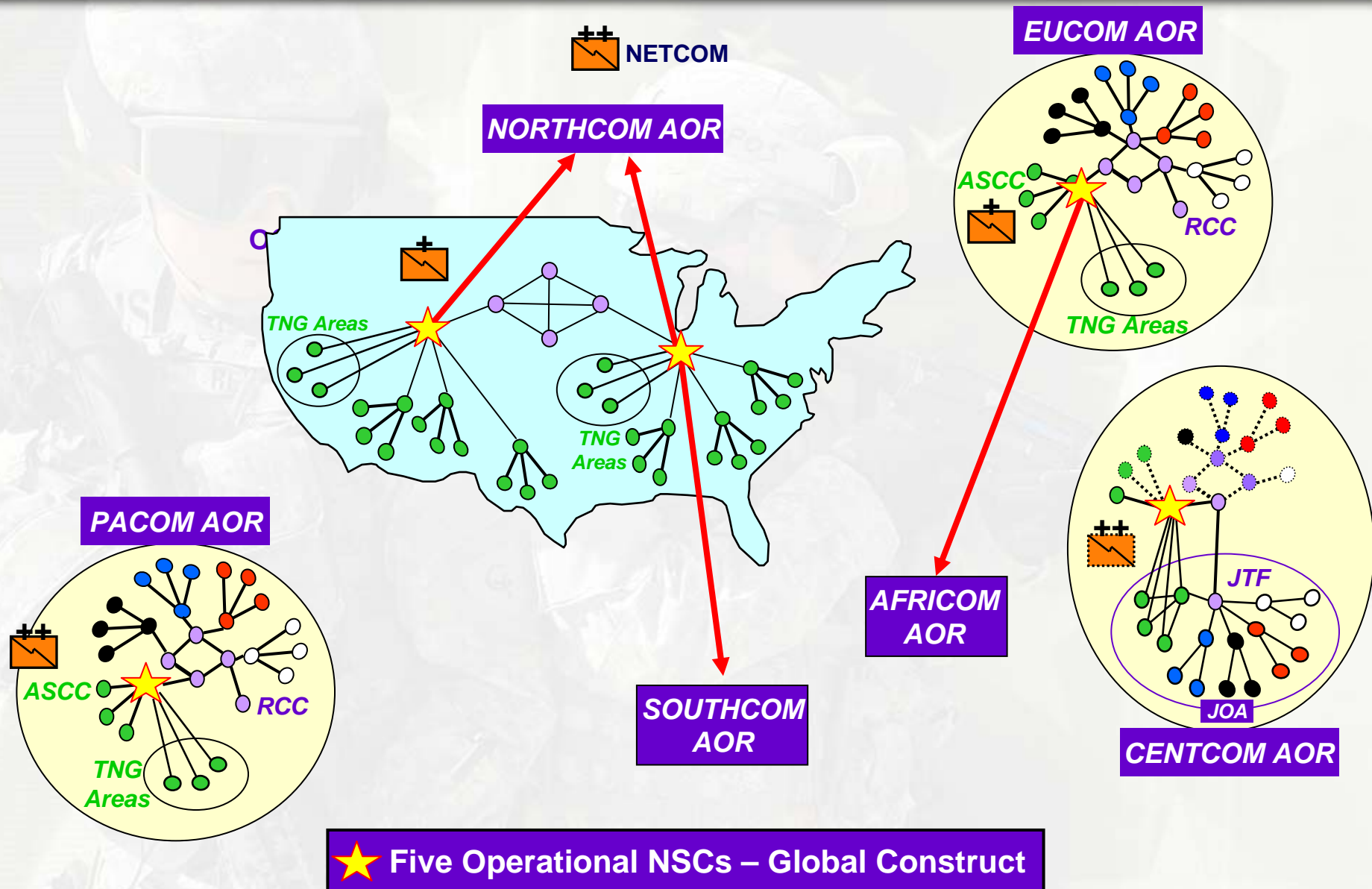- Information Assurance & Security

Network Service Center – Concept

- Regional Hub Node (RHN)
- Area Processing Center (APC)
- Theater NetOps & Security Center (TNOSC)
- Network Service Center (NSC)

The "Always On" Network

Global NSC Construct

NETCOM

NORTHCOM AOR

EUCOM AOR

ASCC

RCC

TNG Areas

TNG Areas

TNG Areas

PACOM AOR

ASCC

RCC

TNG Areas

AFRICOM AOR

SOUTHCOM AOR

JTF

JOA

CENTCOM AOR

⭐ **Five Operational NSCs – Global Construct**

CIO/G-6 Focus Areas

Network Service Centers

Cyber Operations/Warfare

Knowledge Management & Data Czar

Program Objective Memorandum 2010-2015

Cyber Operations Governance

General Kevin P. Chilton
CDR USSTRATCOM

Lt Gen Croom
CDR JTF-GNO
BG Napper
DEP CDR JTF-GNO

Headquarters (4)	Services (4)	NetOps Ctrs (7)	Combatant Commanders (10)	Agencies Field Activities Others (40)

OSD (x2)

DOD IG

Joint Staff

Army **Air Force** **DISA (x7)**

Navy **Marine Corps**

Operational Control of Service
Network Operations and Security Centers

SOCOM **CENTCOM** **EUCOM**

PACOM **SOUTHCOM** **STRATCOM**

NORTHCOM **JFCOM** **TRANSCOM** **AFRICOM**

Army Cyber Operations Support

STRATCOM ★★★★

JTF-GNO

CIO / G6

CIO/G6 OPS Cell

DCO

NETCOM

ARSTRAT

G3

G3 ODI

INSCOM

1st IO CMD

2d IO Bn

AGENCY NOSCs

AFNOSC

NAVNOSC

MCNOSC

A-GNOSC

ACERT (TACON)

Army NetOps Center

TNOSC SWA RCERT

TNOSC CONUS RCERT

TNOSC Europe RCERT

TNOSC Pacific RCERT

TNOSC South RCERT

TNOSC Korea RCERT

PEO / POR NOCs

Functional NOCs
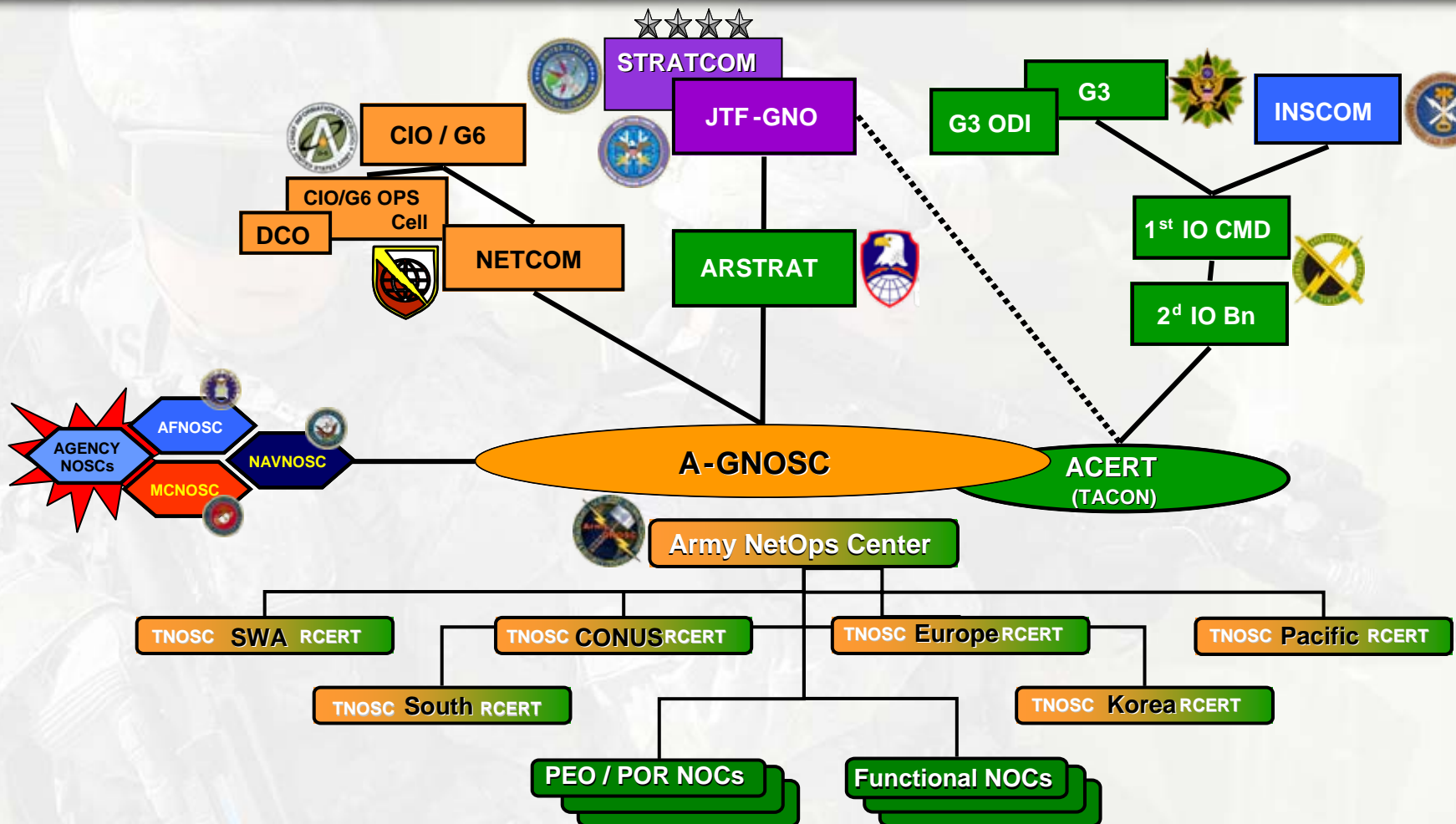
Cyberspace: "A global domain within the information environment consisting of the interdependent network of information technology infrastructures that includes the Internet, telecommunications networks, computer systems, and embedded processors and controllers in critical industries."

DepSecDef Memorandum – 21 Feb 08

HITBSECCONF2007 - MALAYSIA
3RD - 6TH SEPTEMBER 2007 - KUALA LUMPUR
CAPTURE THE FLAG - CTF
LIVE HACKING COMPETITION

rules submit flag teams results ctf crew

Latest Ranking

Country	Team	Break through	Offensive	Defensive	Bonus	Total
		4	5280	510	3110	8900
Vietnam	SaoVang	1	4710	-160	990	5540
Switzerland	WsLabi	1	3180	-225	210	3165
Korea	Padocon	0	2040	-84	0	1956
Korea	Powerhacker	0	0	925	200	1125
US Army	Army Strong	0	540	-205	700	1035
Malaysia	Stealther	0	600	-145	0	455
UAE	maeT t1n@cs	0	0	40	100	140
Singapore	t3nth	0	210	-262	0	-52
Malaysia	DTF07	0	0	-396	0	-396
Singapore	Qb1t					

CTF & Prize Sponsor

scan

CIO/G-6 Focus Areas

◉ Network Service Centers

◉ Cyber Operations/Warfare

◉ **Knowledge Management & Data Czar**

◉ Program Objective Memorandum 2010-2015
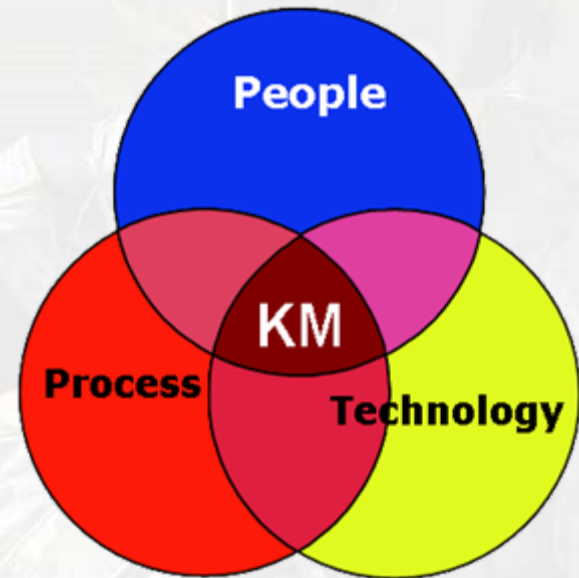
People:

- ✓ Foster culture that encourages and rewards sharing
- ✓ Identify & develop knowledge managers
- ✓ Motivate personnel to use tools & portals

Process:

- ✓ Link KM to organizational processes
- ✓ Leverage "best known" practices

Technology:

- ✓ Enables enterprise-wide knowledge transfer
- ✓ Knowledge portals (i.e. AKO/DKO/JKO, SharePoint, BCKS, Best of Breed, etc.)
- ✓ Secure the network

Sustain WfF Knowledge Management Vision

Observations, Best Practices & Lessons Learned Integration

Knowledge to the Institution

AMC

Deployed

Deployment, Redeployment & Support to AOR

Transformation

ARFORGEN

FORSCOM G4

Generating Force

Operating Force

Sustain WfF

SKN

LOGNet

SME Mentors

ToLs

Lifelong Learning

BCKS

JKO/DKO

Communites of Purpose

CTC

Doctrine, Tactics, Techniques & Procedures (TTP), Training, & PME

Knowledge to the Warfighter

TRADOC/CASCOM

Home Station

LTX, MRX, LVC & BCTP Collective Training Exercises

Heavy BCT Warfighters' Forum Web Portal

https://www.us.army.mil/suite/page/432229

Participators & Facilitators

- BCTC FDNY
- BCTC FCKY
- BCTC FPLA
- BCTC FKKY
- BCTC FRKS
- BCTC FRAK
- BCTC SBHI
- BCTC FCCO
- BCTC Italy
- Regional RC BCTCs
- BCTC FBNC

Coordinators

XVIII ABN Corps
Warfighters' Forum
TCM-IBCT

Enablers

ABNSOTD
CAC
CALL
PEO-STRI
Intelligence COE
AFSOC
Signal COE
Logistics COE
AWG
ACC/AMC (USAF)
Maneuver COE
FCS COE
NATICK
Maneuver Support COE
Fires COE
AMC (USA)
FORSCOM
Soldier Support COE
USAREUR
I & III Corps
USARPAC
JFCOM
USASOC

WfF Website URLs

★ Stryker BCT WfF:

https://strykernet.army.mil/sites/warrior/default.aspx

★ Heavy BCT WfF (Behind AKO):

https://www.us.army.mil/suite/page/432229

★ Infantry BCT WfF (behind BCKS) Can only be reached by clicking on IBCT WfF link on ACOM home page on AKO. ACOM Portal Home Page:

https://www.us.army.mil/suite/page/452027

★ Sustainment WfF (Behind AKO):

https://www.us.army.mil/suite/page/505128

Applications

CNN **Sensor Video**

Collab Plan **Imagery** **VTC**

Web Log

Telephony

Chat **E-mail**

Situational Awareness

Application Data Rate

stationary & wired

Millions of bps

Enables "richer" applications

Extends existing services downward

stationary & wireless

Hundreds of bps

mobile

Base CORPS DIV BDE BN CO PLT SQD

Tailorable Battle Command Services

GCCS-A
- Force Level Plng
- JOPES
- etc

Migration to NECC services
(consistent with Platform FF BC services)

ABCS
- Fires
- Air Defense
- Tact Airspace
- Maneuver
- Logistics
- etc.

Enterprise Services

NCES

Federated CES

SOSCOE

Consistent Services

TOCs (BN & above)

Platforms
(and Dismounted Soldiers)

FCS BC
(integrates consistent CF services)

FBCB2
(incorporates selected FF services)

FBCB2
- SA
- C2 msg

BFT
- SA
- C2 msg

Transport Services

We know where we are

We need to Work the details

Integrated Battle Command Across the Force

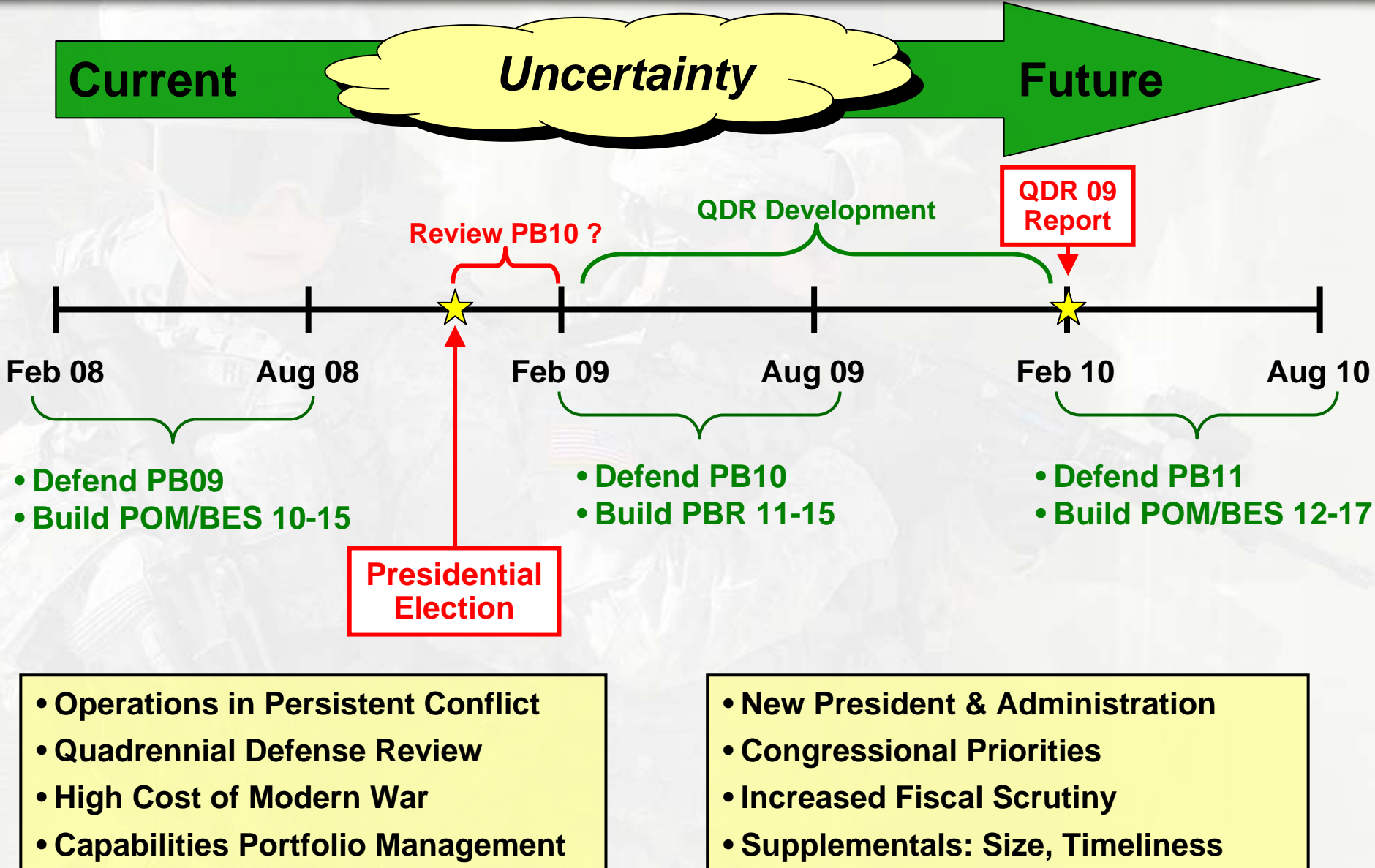**Consistent Services: NECC (web-Services); FCS Services; FBCB2 Applications**

CIO/G-6 Focus Areas

- Network Service Centers

- Cyber Operations/Warfare

- Knowledge Management & Data Czar

- **Program Objective Memorandum 2010-2015**

POM 10-15 – Period of Uncertainty

Current ← → **Future**

Uncertainty

Review PB10 ?

QDR Development

QDR 09 Report

Presidential Election

| Feb 08 | Aug 08 | Feb 09 | Aug 09 | Feb 10 | Aug 10 |

- Defend PB09
- Build POM/BES 10-15

- Defend PB10
- Build PBR 11-15

- Defend PB11
- Build POM/BES 12-17

- **Operations in Persistent Conflict**
- **Quadrennial Defense Review**
- **High Cost of Modern War**
- **Capabilities Portfolio Management**

- **New President & Administration**
- **Congressional Priorities**
- **Increased Fiscal Scrutiny**
- **Supplementals: Size, Timeliness**

Equipping PEG: $6.0B
- MILSATCOM
- Warfighter Information Network- Tactical (WIN-T)
- Joint Tactical Radio System (JTRS)
- Force 21 Battle Command Brigade & Below (FBCB2)
- Army Battlefield Command System (ABCS)

Total Army Funding

$139B

Organizing PEG: $449M
- Army Knowledge Online (AKO)
- Information Technology Agency (ITA)

Sustaining PEG: $217M
- Global Combat Service Support- Army (GCSS-A)
- Deployment Automation

Training PEG: $640M
- Distance Learning
- NETCOM

C4/IT Funding
- $9.97B
- 7.2% of Army TOA

Manning PEG: $375M
- Army Recruiter Information System (ARIS)
- HRC Automation
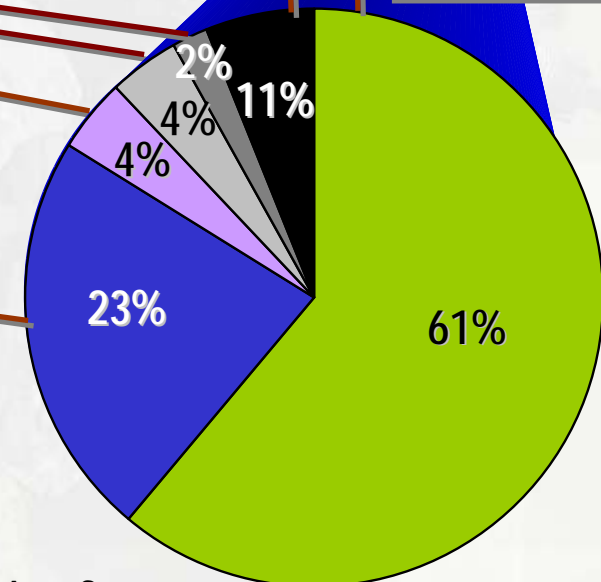- MEPCOM Automation

Installation PEG: $2.25B
- Installation Information Infrastructure Modernization Plan (I3MP)
- Reserve Component Automation System (RCAS)
- Long Haul (NIPRNet, SIPRNet & DSN)
- Base Support
- Information Assurance (IA)

Pie chart values: 2%, 11%, 4%, 4%, 23%, 61%

✡ **You are generating innovative ideas**

✡ **You have shown great flexibility in responding to our needs**

✡ **You have consistently supported our Warfighters**

✮ **Develop solutions to support Army's evolving and flexible architecture**

✮ **Use open standards vs. proprietary systems**

✮ **Maintain delivery of technical, cost, and schedule**

★Veterans Benefits Act of 2003 & Executive Order 13360 sets goal of 3% for SDVOSB Contracts

★Over 12,000 SDVOSB firms registered in Central Contractor Registration (CCR) Database

★Center for Veterans Enterprise maintain VetBiz Vendor Info Pages (VIP) Database

★Army Small Business Website useful resource for SDVOSB http://www.sellingtoarmy.info

★Government Services Agencies Website useful resource as well http://www.gsa.gov/portal

Conclusions!!!

Posturing for Persistent Conflict

…driving an Expeditionary Army

CIO/G-6 Focus Areas

… Strategic Goals, NSC, Cyber Ops, KM, Data Czar & POM

Army Way Ahead

…joint effort working with Industry

Shared Situational Awareness

*…**Bottom Line** to Joint Warfighter*

Army Strong!

QUESTIONS & THOUGHTS

LTG Jeff Sorenson

Chief Information Officer/G-6

AMERICA'S ARMY: THE STRENGTH OF THE NATION
ARMY STRONG